

OPTIMAL ALLOCATION OF COAST GUARD  
DISTRICT RECRUITING FUNDS

Thomas Rupert Hamblin

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## Monterey, California



# THESIS

OPTIMAL ALLOCATION OF COAST GUARD  
DISTRICT RECRUITING FUNDS

by

Thomas Rupert Hamblin

December 1974

Thesis Advisor:

Tom Tate

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## Block 20 - ABSTRACT (Cont.)

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Optimal Allocation of Coast Guard

District Recruiting Funds

by

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Lieutenant, United States Coast Guard

B.S., United States Coast Guard Academy, 1969

Submitted in partial fulfillment of the  
requirements for the degree of

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## ABSTRACT

This thesis reviews the allocation of Coast Guard district recruiting funds for five Coast Guard districts. An attempt is made to determine the marginal productivity of input factors, advertising, recruiting travel, and give away items.

Financial data for the five districts reviewed is compared with the results of a questionnaire completed by 459 recruits, who were enlisted from the districts studied.

An attempt is also made to determine characteristic behavioral traits of Coast Guard enlistees to assist the district military procurement officer to allocate funds in an optimal manner.



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## I. INTRODUCTION AND BACKGROUND

### A. INTRODUCTION

The purpose of this thesis is to explore the current allocation of district recruiting funds by the district military procurement branch chief, (pmr) and propose alternative methods based on developed measures of effectiveness. Three sections of the recruiting budget were reviewed during the study.

1. Enlisted Recruiting Travel
2. Advertising Expenditures
3. "Give Away Items" (Key Chains, Pencils, Matches, etc.)

An attempt was made to evaluate the effectiveness, (in terms of recruits obtained), of these items at various levels of expenditures. The corresponding financial data were also obtained. The data was analyzed and a description was made of a rational allocation mix criteria that would assist the recruiting officer to utilize his available funds in a more efficient manner.

Information was obtained from those Coast Guard districts that send new enlistees to the Coast Guard Recruit Training Center, Alameda, California. A list of these districts is provided below:



<u>DISTRICT</u>	<u>DISTRICT OFFICE LOCATION</u>
Second District	St. Louis, Missouri
Eighth District	New Orleans, Louisiana
Eleventh District	Long Beach, California
Twelfth District	San Francisco, California
Thirteenth District	Seattle, Washington
Fourteenth District <sup>1</sup>	Honolulu, Hawaii

## B. ORGANIZATION AND STRUCTURE

The budget system of the Coast Guard, as it affects recruiting, might best be understood in the context of the structural organization of the recruiting force within the Coast Guard.

In the Commandant's office, the recruiting division is a section of the Office of Personnel. The recruiting division supervises all national advertising programs, initiates research projects to assist the recruiting effort, assigns recruiting quotas to each district to meet the needs of the service, and coordinates all programs that affect Coast Guard recruiting on a national level. The division also provides assistance, and occasionally, additional funds for special projects upon the request of the individual districts.

The Coast Guard is divided into geographic districts which generally correspond to the U.S. Naval districts. (See exhibit 1) [16]. In each district office, the military personnel procurement officer has an assistant (one or two

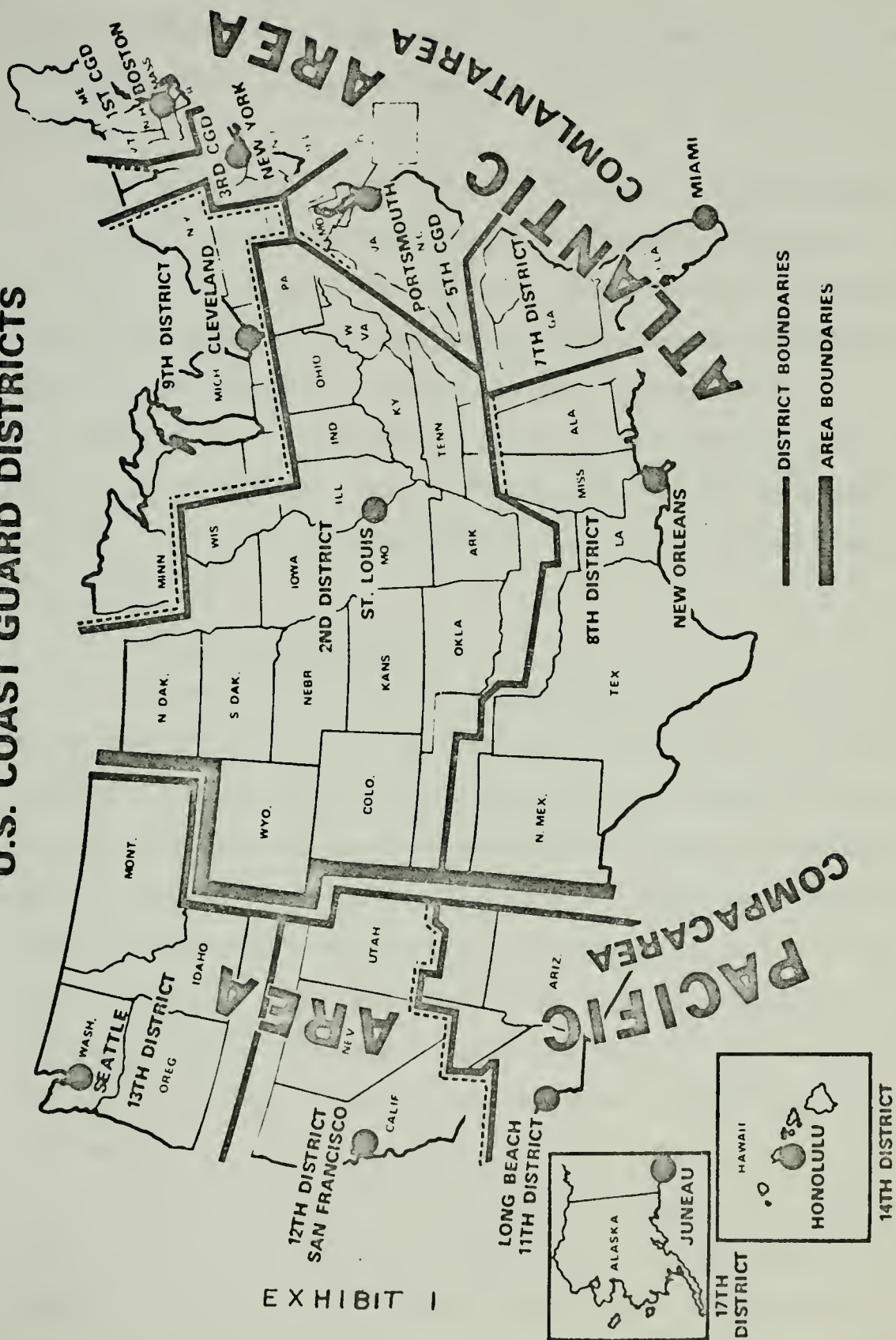
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<sup>1</sup> Fourteenth district responses were summed with those from the second district. This had the effect of providing compensation to the second district since not all of their recruits go to the Alameda Training Center for indoctrination.





# U.S. COAST GUARD DISTRICTS





officers) and a small clerical staff. In some districts these officers have the senior enlisted recruiter stationed in the district office to help administer the recruiting program.

All local recruiting offices are under the operational control of the military personnel procurement branch and ultimately the district commander. Exhibit 2 is an abbreviated organizational chart of the Coast Guard recruiting force at the headquarters and district level [16].

The military procurement officer is expected to perform the following duties. These duties may vary between districts, however, the general work load can be comprehended from this list.

#### 1. Officer Procurement

There are two major programs administered on the officer level. These are for applicants interested in Officer Candidate School and the United States Coast Guard Academy. The procurement officer must promote the Officer Candidate School program, and process applicants. The processing procedure includes administration of an examination and a personal interview. The applicant must also be administered a physical examination, and a review of his college transcript must be performed to insure that he meets the minimum requirements.

Promotion of this program may include visits to local colleges to insure wide publicity of this essential area of procurement. No procurement quotas are assigned in



ABBREVIATED ORGANIZATIONAL  
CHART

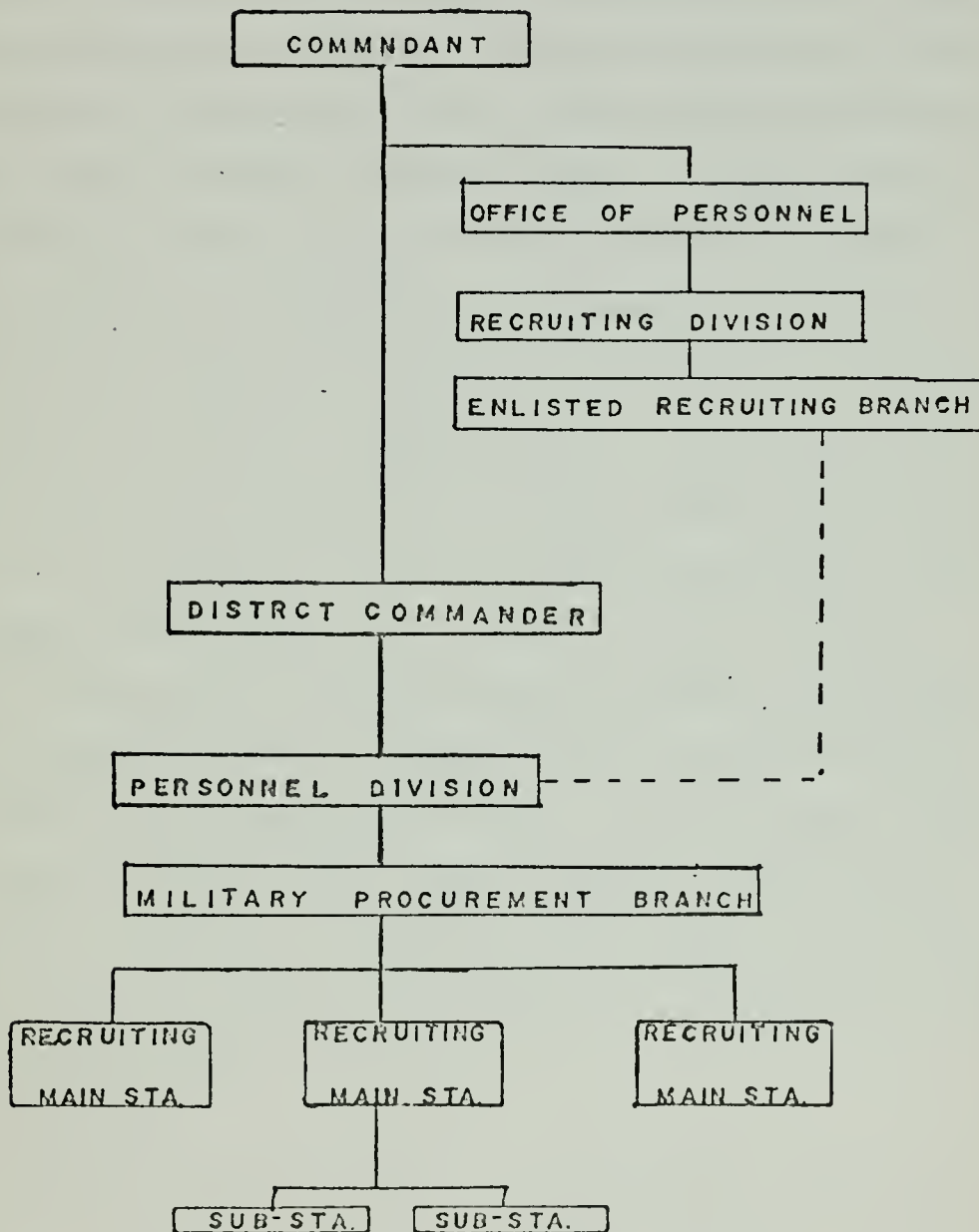


EXHIBIT 2



this area for the officer to attain. The program must be geared for the seasonal input of the convening dates of the class which occurs twice a year.

Academy procurement is another major program administered by the procurement officer in most districts. This program again requires, at least, the coordination of promotion activities (arranging for and visiting high schools and colleges) and processing, to some extent, of applications. While some high school visits can be conducted by recent academy graduates on a temporary additional duty status, in most cases the procurement officer is required to perform these duties personally. Administration of physical examinations and personal interviews are also conducted at the request of the Academy. After tendering appointments on an annual basis, the Academy often requests that "follow up action" be conducted by the procurement officer. This may include arranging visits to Coast Guard facilities and personal contact with the future cadets. Like the Officer Candidate School program, the Academy program is also subject to seasonal variation in work load, with heavy loads between September through December for promotion and February through April for processing.

## 2. Training

In those districts where the procurement officer is also responsible for training, the work load can be severe. In this area the officer must arrange for admittance to various civilian, Navy, and other Department of Defense





schools for specialized training upon request of various offices. Wide promotion of available Coast Guard Petty Officer Schools is also expected of the procurement office. Either directly or indirectly the office is concerned with training of enlisted, officer, and civilian employees within the district.

### 3. Enlisted Recruiting

The management of the enlisted program includes the dissemination of regular and reserve quotas to recruiting main stations, management of funds to further the recruiting effort, development of programs that will assist the recruiting stations in their function and the evaluation of recruiters. The procurement officer must coordinate the efforts of the district recruiting force to optimize results.

## C. BUDGETING SYSTEMS

Before any evaluation of utilization can be made, it is first necessary to understand the present budgeting system and an optimal budgeting system. Provided below is a very brief discussion of the optimal budgeting process and the present system being utilized in the various districts [15].

### 1. Optimal Budgeting System

The optimal budgetary system requires that prior to each budget proposal, a review be made of existing programs. This review should include the following steps:

- 1) Selection of an appropriate measure of effectiveness for each program.



- 2) Determination of the effectiveness at the present level of input.
- 3) Estimation of the change in effectiveness at various other levels of input both higher and lower than present.

New programs awaiting funds should also be evaluated in the same manner by selecting a measure of effectiveness and determining the benefit derived from various levels of funding.

An optimal budget is realized when the ratio of marginal benefits to marginal cost for each program is equal [15].

In evaluating each program, care should be taken to identify fixed cost and variable cost. For example the cost of sending a recruiter on a road trip contains both types of cost. The cost of transportation is fixed and will not increase if the recruiter stays in the same location for one day or one month. The per diem cost is variable and increases each day the recruiter remains away from the office. Therefore, if a procurement officer decides to send a recruiter to a state fair or a career day, he has accepted the fixed transportation cost. The decision concerning the duration of the trip is based on variable cost. If fixed and variable cost are not recognized, then the analysis will seldom produce optimal results. Care must also be taken to select a measure of effectiveness that is appropriate. For example the thirteenth district measured performance of recruiters at one time by the amount of travel funds expended.



It was felt that these figures would indicate the recruiter's effort to meet his assigned quota, but such action would reward a recruiter for making unproductive road trips. During a review of programs the procurement officer recognized this factor and corrected the situation by establishing a system that measured productivity on a more reliable basis. In theory the measures of effectiveness should be convertible to a common element so that the productivity of alternative programs can be compared against each other [4]. Funds should be allocated in such a way so that the last dollar in each program provides the same amount of additional benefit. In practice, however, it may be difficult to determine a conversion factor between programs, especially when a joint interaction between programs is present.

The budget program described above is the so called "zero base budget." If the zero base budget is not utilized, in favor of the incremental budget, existing programs would not be regularly reviewed, causing ineffective programs to be carried over from year to year wasting monetary resources that could be put to better use [15]. Although a few of the districts were utilizing some aspects of this system, none of the districts reviewed were on a zero base budget.

## 2. Present Budgeting System

Each district that was reviewed used an incremental budget to some degree. The incremental budget is a system that starts with the prior year's budget as a base. Additional funds required to maintain present programs at their



current level due to increased cost are added to the prior year's budget. Additionally any new programs that appear to be worthwhile can also be included and the extra funds requested. This is a relatively simple process that alleviates much of the burden of budget submissions. Note, however, that two important processes are omitted in such a system. First, there is no review and evaluation of on going programs to determine their productivity. Second, the system does not require any forecasting of results to be obtained which is one of the major advantages of a well thought out budget proposal [7].

One of the districts contacted indicated that they had reviewed some of their programs for productivity and consequently canceled some. On the other end of the spectrum one of the districts indicated that they were unable to review any programs due to time constraints brought about by an excessive work load; therefore, no programs were canceled or changed. None of the districts were aware of the marginal productivity of any of the input factors that were being used.

### 3. Constraints

In each district that was reviewed during the study, slightly different financial and organizational systems were followed. The primary differences were involved in the administration and control of funds allocated for either recruiter travel or training.





While three districts were required to administrate recruiters travel funds and were allowed to reallocate such funds to alternative uses, two other districts were not. A similar situation was present with regard to training funds. In two districts the military procurement officer, (pmr), was allowed to use the same subhead allotment for both recruiting and training programs. While such a situation does provide a degree of flexibility, it can also cause potential problems as the procurement officer pursues his short term goal (obtaining a recruiting quota) at the sacrifice of the long term objective (maintaining an adequately trained military force). If the procurement officer is required to pursue the long term objective primarily, it is possible that the short term goals will not be achieved. The table provided below displays the varying systems utilized in the districts reviewed.

<u>DISTRICT</u>	<u>CONTROL OF TRAVEL FUNDS BY PMR</u>	<u>ADMINISTRATION OF TRAINING FUNDS BY PMR</u>	<u>POTENTIAL TO REALLOCATE TRAINING AND RECRUITING FUNDS AT THE BRANCH CHIEF LEVEL</u>
2	NO	YES	YES
8	YES	NO	NO
11	NO	YES	YES
12	YES	NO	NO
13	YES	YES	NO

Control of travel funds as indicated above is not within the authority of the military procurement officer in the second and eleventh districts. In the second district the funds are administrated and controlled by the main



recruiting stations in each district. The procurement officer can not reallocate these funds to an alternative use, nor can he directly determine how they will be spent. In the eleventh district, recruiting travel funds are administered by the personnel division chief, along with all other travel funds within the district. While the procurement officer is allowed some input into the utilization of these funds, he is not allowed to reallocate this resource to advertising or other recruiting programs. In the remaining three districts the procurement officer has direct control over recruiting travel funds.

In the eighth and twelfth districts administration of training programs is not conducted by the military procurement branch, but by the personnel division. This reduces the work load in the procurement branch and allows a more concentrated effort towards recruiting. This is not the case in the other districts.

The second and eleventh districts utilized the same subhead allotment for both training and recruiting expenditures which could contribute to a lack of goal congruence.

The above discussion is not meant to be an exhaustive account of the differences between each of the five districts. It is provided only to explain some of the constraints that the different military procurement offices must operate under. Other factors such as geographical size, number of operating units, number of recruiters, number of recruiting stations in the district, are just a few



of the many factors that must be locally evaluated in determining the allocation mix of financial resources.



## II. METHODOLOGY

A questionnaire was developed and responses obtained from 459 recruits at the Coast Guard Recruit Training Center, Alameda, California. The questionnaire was completed by recruits in various stages of their indoctrination program during early September 1974. It is assumed that these recruits were initially enlisted in July and August of 1974 and that their enlistment process was initiated in June and July of 1974. It is further assumed that the decision to join a military service was made during fiscal year 1974. The responses to the questionnaire were compared with financial data for fiscal year 1974 which was provided by each district.

Each district is given the authority to determine the financial mix between various recruiting programs on a local level. Therefore, the study could evaluate different levels of expenditure in each category under review. By combining the level of expenditure in a particular district with a measure of effectiveness for the factor in question for that district it is possible to determine one point on a cost versus effectiveness graph. By repeating this procedure for each district under review it is possible to estimate the curve between the highest and lowest levels of input. Exhibit 4 is an example of the technique used. If the dollars spent for a particular factor (newspaper advertising) in a district (eleventh) produced a certain measure of





effectiveness (percentage of recruits who saw at least one Coast Guard advertisement in a newspaper) one point could be determined (\$595.00, or 25.4%). By repeating this process for each district the curve can be produced. By analyzing these graphs and applying microeconomic theory [15] it is possible to develop an understanding of the costs/benefits as a basis for future expenditures. Data concerning the budget process was obtained during telephone conversations between the author and the various military procurement officers in each district. Information concerning present allocation criteria was also determined in this manner.

Information concerning budgeting procedures, perceptions of productivity, and work load, were obtained through several telephone interviews with the procurement officers in each district. These interviews were conducted between March 1974 and October 1974.

Some of the questions asked of the recruits were to determine behavioral traits of the type of individual who eventually enlisted in the Coast Guard. This information, it is believed, will also be helpful to the procurement officer in the allocation of resources. Therefore, an analysis of this data is provided in Chapter VIII.



### III. DATA FINDINGS

Data for this paper was derived from three sources. Financial data was requested from each district procurement office. Telephone interviews were conducted with the five military procurement officers to clarify the use of subhead accounts and to determine each procurement officer's perception of productivity of funds expended in various areas. This information was compared to the results of a 45 question questionnaire which was completed by 459 recruits.

#### A. PERCEPTION OF PRODUCTIVITY

In an attempt to determine the district military procurement officers view of productivity of various programs, each procurement officer was asked where he would reduce or increase spending if he were required to at the beginning of the fiscal year.

To the question "Where would you cut two thousand dollars?" three of the five districts responded that they would reduce recruiters' travel by the total amount. This indicates that the officer felt that these funds were the least effective at their present level of spending.

The second district does not control recruiting travel funds and therefore, did not have that option. The twelfth district indicated that they would review each recruiting station and reduce travel, housekeeping and communications where the station had an allowance above the district average.



To the question "Where would you cut five thousand dollars?" two districts again responded that they would reduce recruiting travel the entire five thousand dollars. The twelfth district again responded in a similar fashion as above, and the eighth said they would reduce travel by two thousand and advertising by three thousand dollars.

To the question "Where would you spend an additional two thousand dollars?" four of the five districts selected advertising. This indicates that the procurement officers perceived advertising as providing the highest marginal returns. The type of advertising that the officers selected was newspaper advertising in most cases.

With an additional five thousand dollars the officers again selected newspaper advertising with some funds utilized for capital improvements, recruiter training, and other advertising media.

The results indicate that the recruiting officers perceived recruiting travel as providing low marginal returns and advertising in newspapers providing high marginal returns. One might wonder if a formal review of present spending levels at the districts would result in a different allocation mix causing present funds to be shifted from travel to advertising. However, an incremental budget system does not cause such a review and therefore, may be resulting in an inefficient use of funds.



## B. QUESTIONNAIRE

The questionnaire was designed to acquire various types of information. This section will present each question and describe the type of information expected. While the results of some questions will be analyzed in later chapters where they are more directly related, some analysis will be provided here. Three terms that will be used in this analysis require definitions. An applicant is defined as an individual between the ages of 17 and 26, who makes an attempt to join the Coast Guard in either a regular or reserve program. A recruit is an applicant who has joined the Coast Guard and is in the indoctrination and training stage of his enlistment. A respondent is a recruit who completed the questionnaire for this study. Due to the large sample size, the answers of the respondents are assumed to be indicative of those that would be supplied by all recruits except where specifically identified otherwise (where a possible sample bias can be identified).

1) In which Coast Guard District were you enlisted?

This information enabled the author to separate responses by district so that they could be compared with the appropriate financial data.

2) Have you had prior military service?

3) Are you a High School graduate?

4) How old are you?

These questions were asked to determine some basic information about the respondents and will be discussed in chapter VIII.





5) How close do you live to the ocean or gulf?

It was believed that a large number of applicants would come from areas where the community was familiar with Coast Guard activities. This question was asked to determine if the respondents were from areas where Coast Guard activities might be well known. It was recognized that the question would provide little useful information from recruits who enlisted in the second district. In every other district, with the exception of the thirteenth district, over fifty percent of the respondents lived within twenty miles of the ocean or gulf. While this could be indirectly caused by the location of recruiting offices, it could also indicate that proximity to the ocean or gulf affects recruiting in the Coast Guard.

6) Prior to your enlistment did you have any friends or relatives in the Coast Guard?

This question was asked to determine if the Coast Guard was doing its own "in house" recruiting. Fifteen percent of the respondents indicated that they had some type of relative in the service. Over one fifth of the applicants (21.2%) indicated that they had a friend in the Coast Guard prior to enlistment. Together these factors indicate that over one third of the respondents had some connection with the service prior to enlistment.

7) Did you look for the Coast Guard recruiter or did he search you out?

This question was inserted at the request of Coast Guard Headquarters Enlisted Recruiting Branch. While the results



indicate that nine out of every ten recruits responded that they (the recruit) initiated the meeting, this should not indicate, necessarily, a lack of effort on the recruiter. For instance, if the applicant talked to a Coast Guard representative at a career day or boat show, he may perceive that as looking for the recruiter. However, the Coast Guard would perceive the recruiter as being the initiator. It is suggested that extreme care be exercised in the use of the results of this question.

8) Where did you get the most information about the Coast Guard?

While it is expected that the recruiter would provide the most information one other factor displayed significance. Almost one fifth of the applicants selected "family or friend" as providing the most information.

9) Does your family own a pleasure boat?

This question was asked to determine the effect of pleasure boat ownership on Coast Guard recruiting. Over one third (34.7%) of the respondents' families owned a pleasure boat. This factor again signifies the importance of awareness of Coast Guard activities by the potential applicant in the recruiting effort.

10) How many relatives, to your knowledge, have been in the Coast Guard?

While similar to question 6, this question addresses two different points. First there is a tense change from present ("in the Coast Guard") to include the past ("have been



in the Coast Guard"). Second, the friend option has been eliminated. One fifth of the applicants stated that they have had a relative in the Coast Guard at one time or another. It is also significant that approximately seven percent of the recruits in the eighth and thirteenth districts expressed strong family ties with the service having had at least three relatives in the Coast Guard.

11) How many of your family or friends of your family are in the Coast Guard Auxiliary?

The Coast Guard Auxiliary, the "Civilian arm of the Coast Guard," is a group interested primarily in boating safety that assist the Coast Guard with some of its programs. Some requests have been made to enlist their help in the recruiting effort. The results indicate that twelve percent of the respondents had some connection with the Auxiliary.

12) Amount of full time employment? [18]

This question was asked to determine some of the behavioral traits and will be discussed in chapter VIII.

13) Did you talk to any recruiter from other services? [18]

This question in conjunction with the next question was meant to determine the selling ability of Coast Guard recruiters. To analyze this information it would be best to divide up the sample of recruits into three categories. The first category would consist of recruits who did not even talk to a recruiter from another service. The second category would consist of those recruits who talked to a Coast Guard recruiter first, but also talked to other service recruiters.



The third category would consist of those recruits who talked to other service recruiters first, but were eventually enlisted in the Coast Guard. (A fourth category might also provide some useful information if it consisted of those recruits who talked to Coast Guard recruiters but eventually enlisted in another service. Unfortunately the data base for this paper does not provide the information necessary to create such a listing).

Question 13 identifies those respondents who can be placed in category one. Over one third of the respondents (37.5%) indicated that they did not talk to other service recruiters. This figure, however, displayed great variation when it was broken down by districts ranging from 26.6% in the second district to 50% in the eleventh district. Many different elements could affect the size of this figure, such as the proximity to other service recruiting offices, the respondent's initial desire to join the Coast Guard and the perception of life in the particular service by the respondent.

While no information was identified that measured the quantitative size of these and other associated factors, it is assumed that the latter two are of significant importance. Much of the national advertising expenditures are aimed at the last element (perception of service life).

For the recruits in this category, no serious competition has existed between the Coast Guard and the other services. The respondent had either decided to join the Coast





Guard prior to his discussion with the recruiter or was so impressed after his meeting that he felt no desire to pursue the other service opportunities.

14) Which recruiter did you see first? [18]

This question enabled the remainder of the sample to be separated into categories two and three listed above. Of the recruits who talked to recruiters other than just the Coast Guard, only 14.5% talked to a Coast Guard recruiter first (9.1% of the total sample). This figure is the lowest of any of the services for initial contact.

Judging from this data, if the potential applicant was interested in a military career, without a firm service preference, a very small percentage made initial contact with the Coast Guard. (The reader is again reminded that the questionnaire was only completed by individuals who actually did enlist in the Coast Guard.) It was also noted that nine respondents stated that they did not talk to another service recruiter, but also indicated a service other than the Coast Guard for initial contact. This is believed to be due to transposition errors while assembling the data for computer manipulation. This accounts for only two percent of the total sample and does not bias the data significantly.

By combining this figure with those from category one, it can be stated that 46.1% of those recruits who enlisted in the Coast Guard, made their initial contact with a recruiter from the Coast Guard.



In a study conducted by the Air Force Human Resources Laboratory for the Department of Defense services, the comparable figure of enlistment of initial contact ranged from 92% for the Army to 80% from the Navy [5]. This report implied that a very strong correlation existed (for the services reviewed which did not include the Coast Guard) between initial service contacted and the service in which enlistment eventually occurred. This was referred to as "applicant conversion rate." Such a strong correlation does not appear to exist from the data in this study. However, this could be explained by a relative lack of awareness of Coast Guard career opportunities by the potential recruit.

The remaining 53.9% of the sample would be placed in category three. These are the recruits who initially contacted a recruiter from another service, but eventually enlisted in the Coast Guard. This was referred to as a "capture rate" in the Air Force Human Resources study. Twenty three percent of the recruits were "captured" from the Navy, 5.9% were captured from the Marine Corp., 13.7% from the Army, and 10.7% from the Air Force.

The large capture rate from the Navy could be explained by a carry over effect of the sea going service image that the Coast Guard and the Navy have in common. In other terms, the Coast Guard and the Navy may be perceived by potential applicants as close substitutes. The relatively low capture rate from the Marine Corps could possibly be explained by the opposing images of the services. (The Coast Guard's



humanitarian image versus the Marine Corp's image.) These explanations are provided only as possible causes for the variation and can not be substantiated from the data base used for this study. However, recognition of the size of the capture rate is significant in the realization of meeting the assigned recruiting quotas. These factors should be reviewed when determining recruiting office locations (co-location of offices) and attendance with the other services at fairs and career day activities.

It is not possible to determine the number of applicants which were captured by the other services from the data base (only applicants who enlisted in the Coast Guard completed the questionnaire).

When the capture rates are evaluated on a district basis, it is noted that a variation in the size of the captured force (percentage of applicants who talked to another service recruiter first) varies from 67.3% in the second district to 48.3% in the eleventh. It is also noted that with few exceptions, the capture rates by service maintained the same ordinal relationships.

15) Do you remember seeing any Coast Guard Advertising before you enlisted?

16) Where did you see/hear these advertisements?

17) How much did these advertisements impress you?

Questions 15-17 addressed the effectiveness of Coast Guard advertising due to the awareness of, and impressions made on the recruits. This data is discussed in chapter IV.



- 18) How much time did you spend listening to rock stations on the radio prior to enlistment? [18]
- 19) How much time did you spend listening to stations that played mostly soul music? [18]
- 20) How much time did you spend listening to radio stations that were neither "rock or soul" stations? [18]

Questions 18-20 were asked to determine the amount of time the recruits spent listening to various types of radio stations prior to enlistment. Identification of the major type of radio station that potential recruits listen to would allow the recruiting force to concentrate their efforts in the competition for public service time in the most productive areas. This is discussed in chapter VIII.

(21-23) Indicate how often you read the following sections of the newspaper during the three months prior to your enlistment. (Best Guess) [18]

- 21) Sports Section
- 22) General News Section
- 23) Classified Section

Questions 21-23 attempt to identify similar behavioral traits with regard to the reading of newspapers. It is believed advantageous to identify those sections that the potential recruit will see if advertising is to be effective. This information is also presented in chapter VIII.

(24-28) About how many times (best guess) did you see/hear Coast Guard advertising of the following types during the three months prior to your enlistment? [18]





- 24) Newspaper
- 25) Magazines
- 26) Radio
- 27) Television
- 28) Bill Boards

Questions 24-28 provided the study with the ability to identify those media through which Coast Guard advertising is seen most often. These points are addressed in chapter IV.

- 29) Which method of advertising do you remember best?

This question attempted to identify the most effective means of advertising by identifying that type of advertisement that is remembered best.

- 30) Which of the following do you think was the most important in your decision to contact a Coast Guard Recruiter?

[18]

Question 30 attempted to identify the most important reason for contacting a Coast Guard recruiter. This is a very important question in this study since it attempts to identify that area that had the greatest impact on the recruiting process as perceived by the recruit. Only four possible answers were provided for this question:

1. Advertising
2. A telephone call or personal contact with a Coast Guard representative
3. Advice from a friend or relative
4. Advice from a teacher or counselor



Before reviewing the results to this question, it should be noted that it is possible that other important factors may have existed that were not provided as a possible selection. This, of course, would force the recruit to either select the next closest answer or select the second or third most important reason.

Advertising was selected by 13.3% of the sample as the reason causing them to visit a Coast Guard recruiting office. When this information was cross tabulated with the number of times advertisements were seen in the various media, (questions 24-28), it was determined that multiple exposures were productive only until an advertisement was seen five times. After this point it appeared that the importance of advertising did not increase significantly.

A telephone call or personal contact with a Coast Guard representative was selected by 40.7% of the sample. This factor would indicate that recruiting travel had a significant impact. It is not possible, however, to determine if the contact was with a recruiter or with a Coast Guardsman performing his normal duties. Of those recruits who had prior service, the personal contact with a Coast Guard representative factor displayed a significantly larger role with 63.2% of this subset selecting this answer.

In an attempt to more specifically identify the productivity of recruiting trips, this question was cross tabulated against questions relating to boat shows, career days, and fairs. The personal contact factor was selected by a larger



proportion of recruits who also saw a recruiter at career day or a fair than did the sample as a whole. This did not appear to be the case with boat shows, however.

"Advise from high school teacher or counselor" was selected by only 4.1% of the sample indicating that this group was not a major supply source of recruits. This figure was slightly higher, 8.5% when the recruit also saw an advertisement in his high school magazine or newspaper.

The second largest response was recorded by recruits selecting a friend or relative as the important factor (36.4% of the sample). This factor is too large to be neglected. It is impossible, however, from the data base to determine the motivation of the friend or relative to recommend the Coast Guard. It was noted that this factor correlated very well when compared to question 6, "Prior to your enlistment, did you have any friends or relatives in the Coast Guard?" The importance, by type of friend or relative, is listed below:

1. Brother
2. Other Relative
3. Friend
4. Father

As the family tie with the Coast Guard increased, (number of relatives who served in the Coast Guard) so did the importance of the friend or relative factor.

(31-38) Indicate whether you received any of the Coast Guard marked items indicated below:



- 31) Book Covers
- 32) Matches
- 33) Key Chains
- 34) Pencils
- 35) Calendars
- 36) Rulers
- 37) Decals
- 38) Bumper Stickers

Questions 31-38 attempt to identify the type of give away items that were received by the recruits. This information is discussed in chapter VI.

- 39) Did you ever use any of the items listed in questions 31-38?

This question assesses the effectiveness of give away items by looking at the recruits' perceived usefulness of these items. This question will also be discussed in chapter VI.

- 40) Is there a recruiter in your home town?
- 41) Approximately how far do you live from the closest Coast Guard Recruiting office open every workday?

Both of these questions have attempted to identify the need for funded recruiting travel (in excess of local travel near the recruiting office).

(42-44) Indicate if you saw a Coast Guard recruiter or representative at the listed events.

- 42) Local, County or State Fair
- 43) Career Day
- 44) Boat Show





These questions attempt to identify the usefulness of a particular category of recruiter travel that is conducted by each of the districts reviewed. The results of questions 40-44 are discussed in chapter V.

45) Were you impressed with the display at these events?

This question was inserted to determine the recruit's impression of the display of visual and audio visual aids utilized by the recruiters. Sixty-nine percent of the sample indicated that they never saw a Coast Guard display. Of those respondents who saw displays, 89% indicated a favorable response. Only 11% indicated that they were either moderately unimpressed or very unimpressed. The initial interpretation of this data may indicate that the present supply and status of Coast Guard displays is adequate, however, such an interpretation would assume a relation between the sample and the general population that might not exist. In other words the sample may be biased in that the recruits who enlisted were not affected by a display at all. However, a more imaginative and appealing set of displays could increase the usefulness of recruiters at boat shows, career days and county fairs. The data base does not provide the information necessary for this analysis.

When this information was further broken down by district, no particular district received significantly different dispersement of either favorable or unfavorable responses. This is interpreted to mean that none of the districts is either particularly strong or weak in this area.



#### IV. ADVERTISING PRODUCTIVITY

There are two important factors in determining the effectiveness of the total program of Coast Guard advertising. These factors are awareness and impression. Awareness of advertising is dependent upon the number of advertisements displayed and the number of people who see each advertisement. The impression factor is dependent upon a myriad of factors such as the size of the advertisement, the number of times it was seen, the attractiveness of the advertisement and many others. When distributing advertisements, the military procurement officer must recognize both of these aspects of advertising and the factors that affect them.

For the purposes of this study advertising has been broken down into three categories. The categories are defined below.

1) Direct Advertising - This consists of advertising purchased on a district level for display only within the district. An example might be classified advertisements in newspapers. Benefits of such district expenditures are expected to directly accrue to the recruiting effort within that district.

2) Indirect Advertising - This consists of advertising purchased on a national level by the Commandant's office for distribution nation wide. An example would be an advertisement placed in a nationally distributed magazine such as POPULAR MECHANICS. Such expenditures are made to take



advantage of economies of scale and are conducted to assist the recruiting effort nationally. The local recruiting effort indirectly receives the benefit of such an expenditure and allocates no local funds to this program.

3) Free Advertising - Such advertising is primarily provided by the electronic media as a requirement of the Federal Communications Commission for public service time. These are the advertisements on radio and television which are provided free of charge to government and social or charitable organizations. The approval and allocations of time slots is the decision of the local radio or television station. Competition in this area for this valuable free advertisement time is considered to be very intense. Such time can not be purchased by the armed services to assist the recruiting effort.

By definition, the only advertising that the district procurement office funds from the subhead allotment under his control are those in the first category. Distribution of category two and three advertising can not be assumed to be uniform throughout the country. Category two advertising is disseminated with the assistance of an advertising firm, to meet specific objectives defined by Coast Guard Headquarters. These objectives could be to increase the number of minority recruits or to assist the efforts of a district that has not been meeting its quotas. Category three advertising is distributed with the same or broader objectives, but is also based on the probability of a favorable reception



by the media. The Commandant's office receives and reviews reports from the media indicating the time and number of showings that their public service advertising has received. The review process enables them to identify those stations where the future likelihood of air time is high enough to warrant continued distribution of such "spots." There are some costs incurred in the production and distribution of such advertising. Production costs are funded by the Commandant's office while distribution to the media may be by a national mailing list or by local recruiters. The cost of local distribution is considered to be immaterial. Therefore, to the districts, such advertising is basically free.

#### A. AWARENESS

To determine the effectiveness of advertising, the awareness question was first addressed. Awareness is defined as the percentage of recruits who remembered observing a Coast Guard advertisement.

Question number 15 asked "Do you remember seeing any Coast Guard advertising before you enlisted?" To this question, 72.5% of the recruits gave a positive response. If this data is plotted against total advertising expenditures for each district, the graph in exhibit 3 can be developed. By performing a linear regression upon the points, it is possible to see that the line intersects the ordinate axis (percentage of recruits who saw at least one Coast Guard advertisement) at the 65% level. This percentage could be interpreted to be the percentage of recruits who would have





# TOTAL ADVERTISING EXPENDITURE

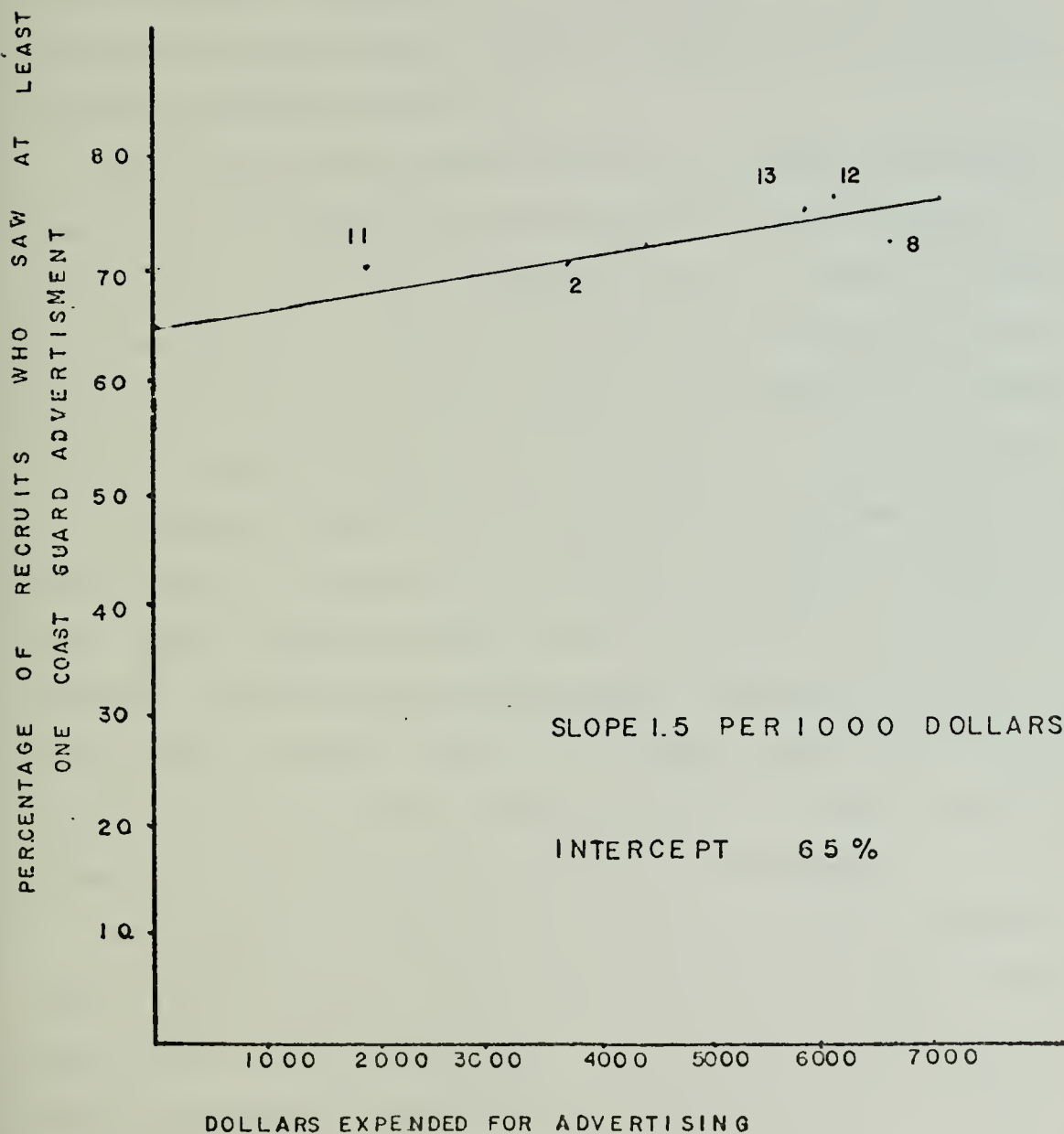


EXHIBIT 3



seen advertising of categories two and three even if the districts did not spend any money on category one advertising. This graph, therefore, is a representation of awareness of all categories of advertising versus funds expended for category one advertising. The slope of the line indicates the effectiveness, with respect to awareness, of dollars spent by the districts on category one advertising. The slope indicates that each one thousand dollars expended increased awareness by 1.5%.

There are certain characteristics of linear regression that must be remembered when evaluating this information. First, this interpretation assumes that the effect of category two and three advertising was uniform among the districts. While the criteria used by the Commandant's office are not designed to achieve uniformity, the variation from it is unknown. Second, the interpretation assumes that the only change in awareness is caused by category one advertising. This also may not be true. It is possible that some effects of the non-uniformity aspect discussed above are also responsible for a portion of slope. Quantitative analysis of the size of these effects would be extremely difficult, however, a qualitative review is provided below.

The eleventh, twelfth and thirteenth districts plotted above the regression line indicating a "higher than average" awareness for funds expended. It is noted that the twelfth and thirteenth districts also enjoyed the second and third highest awareness of category three advertising and the highest two positions in category two advertising.



The second and eighth districts displayed a "lower than average" awareness. The second district also ranked in the lowest or next to lowest position in all types of category two and three advertising that was reviewed. The eighth and eleventh district do not follow this pattern of explanation. The eighth district plotting below the line, had high awareness of categories two and three. The eleventh plotted above the line, but had the low awareness of category two and three. This deviation could be caused by random error. Another explanation could be the effect of repetitive responses. The graph indicates at least one exposure, it is possible that the same individuals (in the eighth district) saw advertisements in each category at least once, while in the eleventh district the individuals saw only one advertisement, but they were more widely dispersed by category.

The last two explanations of the variation to be proposed deals with efficiency and non enlisted programs. It is possible that those districts plotting above the line have identified their local environment in such a way as to receive the highest change in awareness for each dollar expended. Those districts plotting below the line may not have expended funds as productively. It should be noted, however, that none of the districts have plotted far from the regression line indicating a relatively uniform level of return for funds expended.

Funds expended for promotion of non enlisted programs could affect this data since only enlisted personnel were in



the sample. However, these funds were small, therefore this factor does not appear to be material.

To more fully understand the awareness of advertising it would be best to evaluate each category.

1. Category One

Every district conducted category one advertising in the form of newspaper advertising. Question 24 of the questionnaire was asked to determine the awareness by the recruits of Coast Guard advertising in newspapers. To determine the percentage of recruits who observed at least one advertisement, the percentage of recruits who responded "never" was subtracted from one hundred percent. This information, categorized by district, was plotted with the corresponding financial data to produce the cost versus effectiveness graph displayed in exhibit 4.

Since Coast Guard Headquarters did not fund advertising of this type and none was provided free of charge, it has been assumed that the origin is also a data point.

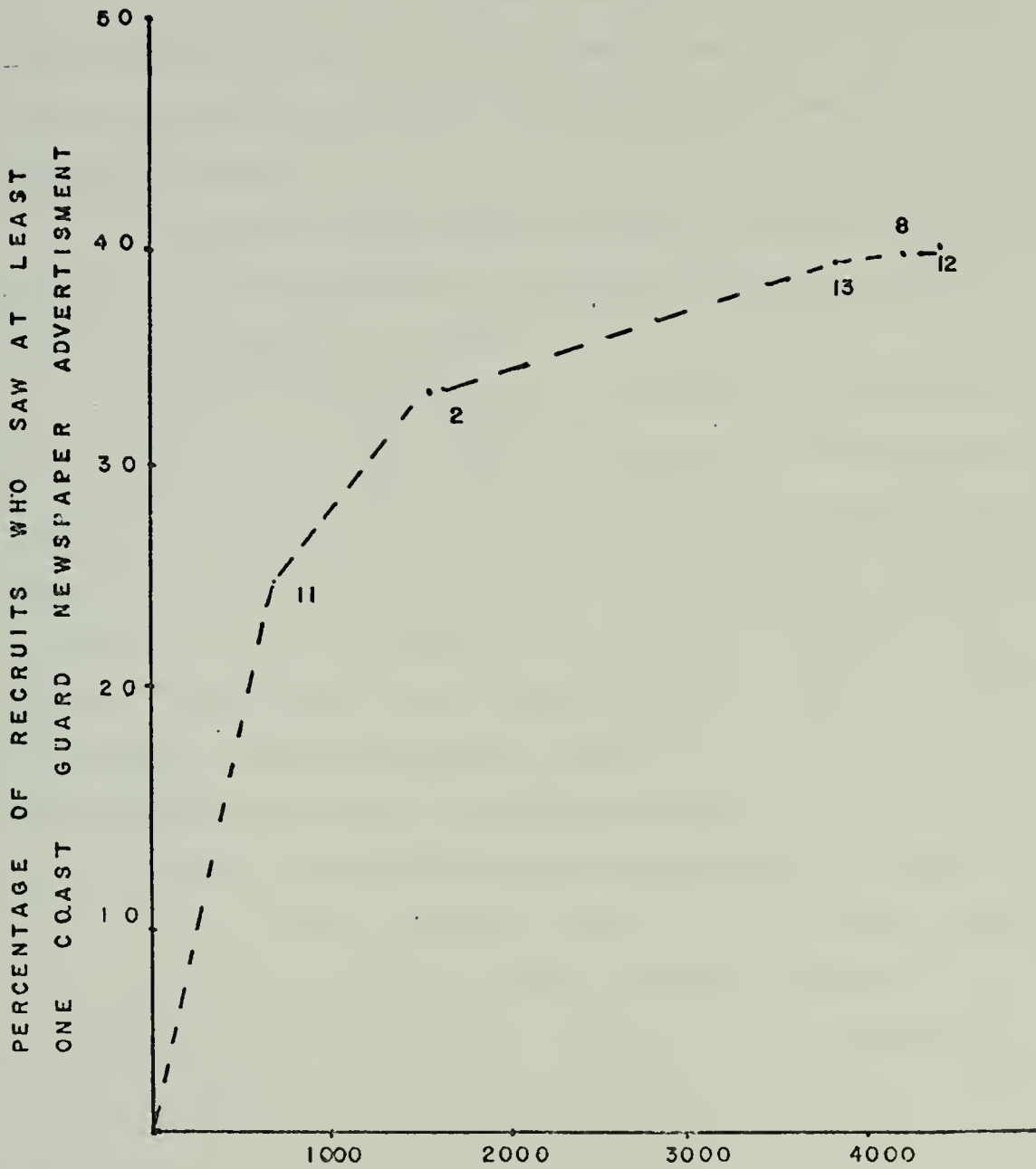
This exhibit indicates that the total benefit is increased until total expenditures exceed \$4,000. Any additional funds did not produce appreciable results.

There are some factors that could bias this information. For instance if large portions of the available funds were expended early in the fiscal year, it is possible that the sample would not reflect an appropriate awareness. The analysis assumes that spending was made at a relatively constant rate over the year. Also if a more selective and





NEWSPAPER ADVERTISING EXPENDITURES



DOLLARS SPENT ON NEWSPER ADVERTISING

EXHIBIT 4



systematic criterion was used for the placement of advertising, a higher awareness figure would be realized. However, under the fiscal year 1974 criteria any funds spent over \$4,000 did not appear to be productive.

Other areas in category one advertising included advertisements placed in such areas as baseball parks, high school publications, buses, special interest periodicals and shopping centers.

In each of these areas neither the amount of the expenditure or the frequency of occurrence between districts was large enough to evaluate.

Billboard advertising was addressed in question 28. By developing the percentage of recruits who saw at least one Coast Guard billboard in the same means as described above for newspaper advertising, some unexpected results developed. The total expenditure, in the five districts reviewed, for billboard advertising was \$525. However, 59% of the sample indicated that they had seen at least one billboard displaying Coast Guard advertisements. It is noted that in many cases billboard advertising space is provided on a rent free basis requiring only that the service pay for the labor of installing the advertisement. However, the highest awareness figure was indicated in the thirteenth district where no funds were expended for this type of advertising.

Two possible explanations for this deviation are listed below. First it is possible that many of the recruits



confused billboard advertisements for the other services with Coast Guard advertisements while completing the questionnaire. The second explanation is that the recruit may have defined the sidewalk sign displayed in front of post offices and other government buildings as a billboard. Such signs are in front of almost every recruiting office and it is quite likely that over half of the recruits would have seen such an advertisement. The latter explanation is felt to be the more likely cause for the unexpected response. This is stated because billboards were also listed as the second most remembered type of advertising (question #16).

## 2. Category Two

In category two, indirect advertising, a very high percentage of the recruits indicated an awareness of Coast Guard advertising in magazines (58.6%). This advertising is funded by Coast Guard Headquarters and does not reduce the district recruiting funds. The variation between districts in this category, however, (51.8% in the second district to 65.8% in the twelfth district) is noteworthy. Recognition of this information would identify those districts where local advertising is more important to increase awareness.

The three leading districts for awareness of category two advertising (having seen a Coast Guard advertisement in a magazine at least once) were also the leading districts for repeat exposure (having seen a Coast Guard advertisement in a magazine three or more times). This indicates that the selection of the media by Coast Guard



Headquarters was appropriate for the eighth, twelfth, and thirteenth districts. The reader is again reminded that advertising funded by Coast Guard Headquarters is conducted using different criteria than what is used on a local level. After creating specific goals which headquarters desires to obtain (such as minority population or geographic area) an advertising consulting firm is requested to suggest the appropriate media after making an evaluation of demographic properties of each possible outlet. This enables Coast Guard Headquarters to be very selective in the use of advertising funds.

### 3. Category Three

With regards to category three, free advertising on radio and television, the eighth district realized the highest awareness factor (questions 26 and 27). The eleventh district realized the smallest awareness factor in each category and was significantly below the other districts. The low figure in the eleventh district could be due to the clustering of recruiting offices in the Los Angeles/Long Beach area where competition for free public service time is extremely intense.

The variations could also be due to a planned diversity in effort by the Commandant's office. The military procurement officer at the district level has little or no control over the amount of category two or three advertising conducted in his district. He should not, therefore, be held responsible for what some might feel to be too low of an awareness figure.





## B. IMPRESSION

The other important aspect of advertising besides awareness is the impression that advertising creates. Question 17, "How much did these advertisements impress you?" addresses this point. Seventy percent of the responses indicated that they were either impressed very much or moderately impressed. This compares with 14.7% who responded either "not impressed" or "impressed unfavorably."

When this information is categorized by district, the results show some variation. The eleventh and thirteenth districts received the smallest percentage of favorable responses (64.8% and 63.8% respectively) and the largest percentage of unfavorable responses (18.5% and 16.9%). The eighth district received the most advantageous response, displaying high favorable and low unfavorable results.

Questions 16 and 29 requested the recruits to select the type of advertising that they remembered best. While these questions are very similar, it should be noted that 29 allows magazines as a possible choice, where question 16 had the substitution of high school magazine or newspaper. This caused some difference in the results.

Billboards, as discussed earlier in this chapter, were remembered very well. This was unexpected given the number of Coast Guard billboards on display.

Television advertisements received the highest rating (38.3%) for "rememberability." Magazines and high school publications were each selected by approximately one fifth



of the recruits. The lowest degree of "rememberability" was noted in the areas of radio and newspaper advertising.

The newspaper advertising is significant since such a large portion of each district's advertising funds were utilized in this area.

### C. CARRY OVER EFFECT

While no data is available to determine the carry over effect on Coast Guard recruiting advertising from such advertising as is conducted by the Boating Safety and Auxiliary branches, it is believed to exist.

The Coast Guard is unique as compared to the other armed services in that the peace time missions of the service require the Coast Guard to perform public service advertising in areas other than recruiting. These factors should be recognized and capitalized on whenever possible.

It is noted that the recruiting effort benefits from the activities of the public information office as it disseminates information on Coast Guard activities relating to search and rescue and oil pollution abatement. This factor can not be quantified from the data base, but is believed to exist.

It is also noted that the Boating Safety branch conducts extensive advertising campaigns which may assist the recruiting effort by increasing the public's awareness of Coast Guard activities.



## V. RECRUITING TRAVEL PRODUCTIVITY

The second type of expenditure that was reviewed in this study was recruiting travel. In this area, an effort was made to look only at those funds expended for recruiting trips by the enlisted recruiter (as opposed to the military procurement officer and his assistants) to areas outside the immediate vicinity of the recruiting office. Funds for local travel and normal vehicle rental were not included.

The funds that were accounted for were limited to those expenses that are funded by the district office (with the exception of the second district) for travel under government orders for the purpose of recruiting. These consist primarily of "per diem" funds with some travel and miscellaneous expenses included.

### A. VALUE JUDGMENT

In the research for this paper, it was discovered that the military procurement officers appear to be operating under different sets of objectives. The lack of objective congruence is caused by Coast Guard Headquarters not clearly defining the goals they wish pursued.

At least one of the military procurement officers (the eighth district) indicated that he felt a responsibility to cover his geographic area relatively uniformly to produce a set of recruits that were not sectionalized from one area of the country. To achieve this goal, he designed his recruiting trips accordingly.



Two other districts, the eleventh and thirteenth, indicated that they only revisited areas that had historically been productive. This indicates productivity as the primary requirement.

The variation of objectives between districts makes the measurement of efficiency difficult. The difficulty is caused by the additional constraint that the eighth district has imposed upon itself.

It is the author's opinion that productivity should be the only criterion for recruiting travel expenditures. It is believed that the recruiter has an obligation not to spend any more money than is required to achieve long and short term goals. The optimal situation, therefore, would be realized if the quotas could be filled with no travel expenditures. The author considers a recruit from the vicinity of the recruiting office no worse (or better) than a recruit who lives two hundred miles away. (However, the cost to the service increases as the distance to the recruiting office from the applicant's residence increases). If this statement is true, why then should the recruiter do any traveling? The only logical answer to this question is to meet the long and short term goals of the service. The short term goals are defined as the recruiting quota for the present and next month. The long term goal is the ability to meet recruiting requirements for periods of time in the more distant future.

It may be necessary to explain this view favoring the productivity criterion instead of the uniform distribution





criterion in the absence of guidance from Coast Guard Headquarters. It should be noted that neither of the officer procurement programs (United States Coast Guard Academy and Officer Candidate School) impose geographic quotas, but are based on a most qualified criterion. The literature on the Academy specify that no geographic quotas will be applied [3]. The Coast Guard Personnel Manual in the section regarding Officer Candidate School makes no mention of geographic quotas [17]. It is believed that this should also be the case for enlisted personnel. It is further recognized that unproductive recruiting travel funds could be used more efficiently for an alternative purpose in recruiting or other Coast Guard activities. This paper will look at recruiting travel from a productivity basis only. This fact should be remembered when the district effectiveness is reviewed.

#### B. DETERMINATION OF A MEASURE OF EFFECTIVENESS

The optimal measure of effectiveness for this category would be a ratio of dollars expended on travel per recruit acquired. However, this would require that dollars spent on recruiters' travel be the only dependent variable. This situation is highly unlikely. Due to the dynamics of recruiting and the inter-relationships of the many factors that cause a prospective applicant to enlist in the service, it would be extremely difficult to identify this number with absolute accuracy.



### C. EMPIRICAL RESULTS

Exhibit 5 has attempted to handle this problem by determining the percentage of recruits who live over fifty miles from the nearest recruiting office and plotting this figure, for each district, with the corresponding financial data relating to cost incurred for recruiters' travel. This measure of effectiveness, while not optimal, does give some concept of efficiency of dollars spent in this category. This process implies that the recruit who lives over fifty miles from an office would not be enlisted in the Coast Guard unless the recruiter travels to his home town. It also implies that any trip over fifty miles from a recruiting office is funded under government travel orders. These are simplifying assumptions necessary to utilize the information available in the data base.

A least squares linear regression was performed on this data. The slope of the regression line indicates the increase in the percentage of quota obtained from an additional one thousand dollar expenditure on recruiting travel. The intersection at 14.08% indicates the percentage of quota that would be enlisted if no money was spent in this category. There are several possible explanations for this occurrence which implies that the applicant would seek out the recruiter on his own. The reader is reminded that extreme care should be taken when extrapolating results from empirical data because the results outside the relevant range may be misleading.



# RECRUITING TRAVEL EXPENDITURES

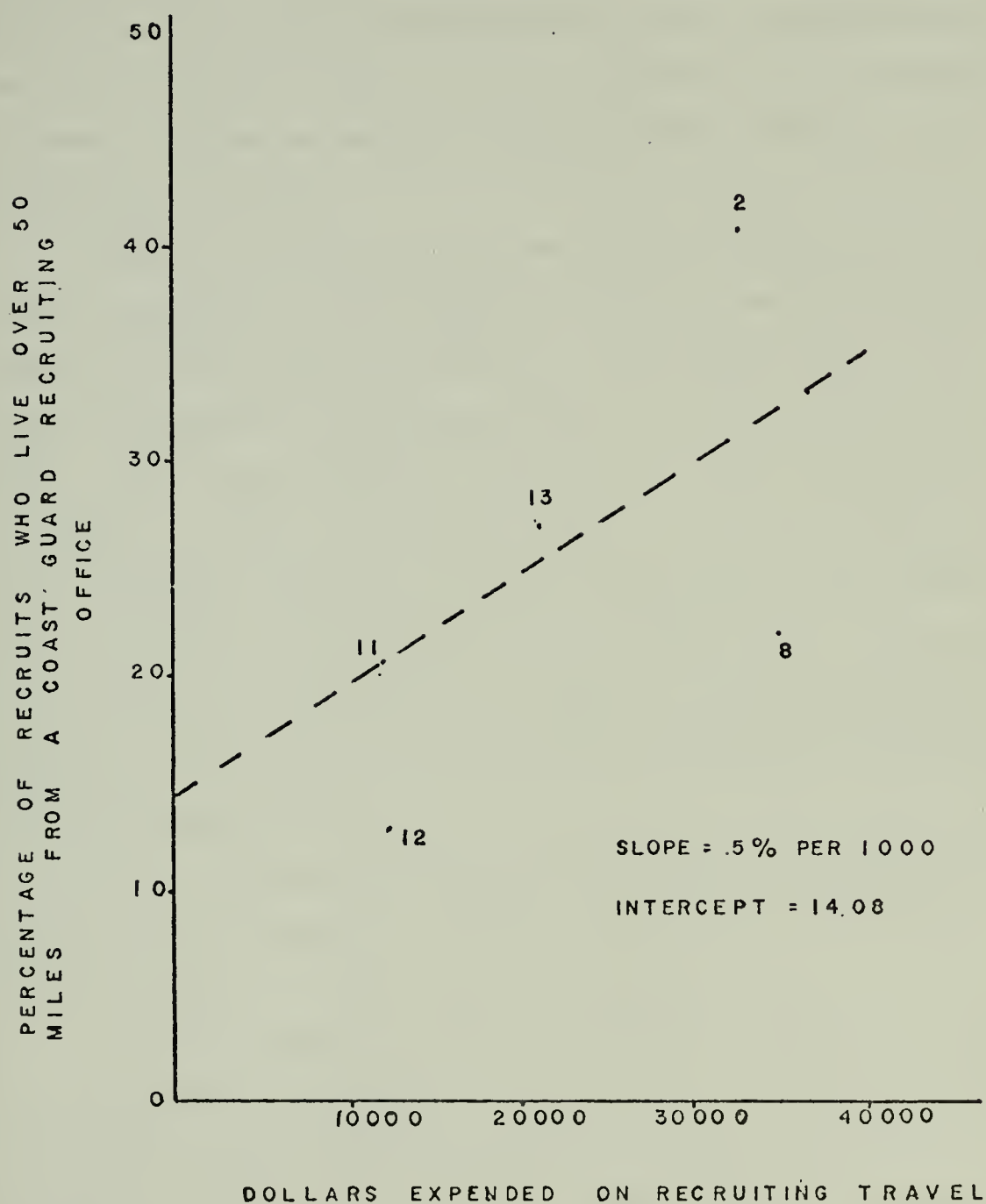


EXHIBIT 5



The wide dispersion around the regression line should be noted. Those districts on or above the regression line (eleventh, twelfth and thirteenth) have operated on a more efficient basis than those below the line. The further the vertical distance from the line, the greater the difference between "average efficiency" and that that existed in the particular district.

A review of the criteria used by the districts indicated that the eleventh and thirteenth districts had a relatively formal review process to determine the productivity of the trips conducted. This review process is on the form of pin maps. Each time a recruit is enlisted, a pin is placed at his home of record on a district map. If after a period of time, repeated visits to an area do not prove to be productive, a substitute recruiting site is selected. In the second district (as mentioned in chapter I) the recruiting main stations administrate and are directly funded for recruiting travel expenditures.

As was discussed earlier in this chapter, the eighth district is attempting to achieve a goal with recruiting travel funds other than just productivity.

The twelfth district is not at present conducting a review process to eliminate unproductive recruiting travel expenditures. Each recruiting station submits a monthly itinerary of trips for approval. The military procurement officer normally approves the itinerary if the station has not spent "more than its share" of the allocated travel





funds. The various itinerary appears to be based on historic practice, so that the trips are made to designated areas based on where the recruiters have always gone in the past. It is not believed by the author that such criteria can lead to an optimal use of funds.

It should be noted that although the eighth district is attempting to canvass the geographic boundaries of their district, they also do not have a formal review program.

#### D. NON DOLLAR COST OF TRAVEL

The military procurement officer should not take the myopic view of recruiting travel that all costs are financial in nature. There are non dollar costs that must be identified and related to the benefits derived from recruiting travel. The recruiter's time is one such cost. Actual travel time from the office to the temporary recruiting sight is unproductive. As the number and length of trips increases so does this unproductive time. Therefore, the benefits derived from the trip must also exceed the benefits that would be derived if this time had been used in the local vicinity.

A related cost that is not quantifiable has also been noted. It is recognized that the nature of recruiting duty is extremely demanding, often requiring more than ten hours a day. The military procurement officer must evaluate the motivational cost on the recruiter of excessive and lengthy road trips.



The cost of applicant travel is not included in this analysis, however, it is a cost the service must incur. This cost, during the processing stage of enlistment, also increases as the number of recruits from distant areas increases. The military procurement officer should also keep this in mind.

While these factors should not reduce necessary road trips to meet the needs of the service, they should be reviewed along with the dollar cost to the district when approving itineraries submitted by recruiting main stations requesting recruiting travel funds.

#### E. EXCEPTION

One necessary exception to the productivity criterion should be discussed. A great amount of Congressional pressure has been placed upon all of the services to insure an acceptable minority mix. Due to the location of the recruiting stations, it may be necessary to travel to areas that may, as compared to recruiting trips as a whole, be less productive to achieve this goal. This is a factor that may or may not exist depending on the environment in which the recruiters exist. While productivity must be ignored, this constraint should be recognized.



## VI. GIVE AWAY ITEM PRODUCTIVITY

The third factor that was reviewed during this study was the financial resources expended from district funds for give away items. Give away items are defined as inexpensive articles marked with an identifiable Coast Guard insignia that are disseminated to the public by the recruiting force at no cost to the receiver and which have an alternative use to the receiver. These items were often distributed at recruiting offices and at such activities as career days, boat shows and fairs. While such items were commonly purchased by military procurement officers in the past, it was discovered that none of the offices are committing resources, of a material amount, to this program at present. Only the eighth and second district purchased any such items during the fiscal year 1974. Their total expenditure was approximately \$1,300. For this reason it is impossible to determine a cost effectiveness ratio for this area.

Coast Guard Headquarters has produced some such items (book covers, matches, decals, and bumper stickers) which are distributed by the recruiting force, however, cost/benefit analysis of headquarters' expenditures is beyond the scope of this paper.

It is assumed that in two cases a positive response by a recruit with regard to receiving such items was caused either by the recruiter distributing his remaining stock of such items or by transposition errors in preparing the data for



computer manipulation. It is impossible to determine the size of the transposition error, but it is not believed to exceed five percent. It should be noted, however, that such error can exist and only an estimate has been made of its size.

Interviews with the military procurement officers indicated that the second and eighth districts had the largest inventories of give away items purchased from local funds.

The results of questions 31-38 indicated that two items did not receive enough positive responses to indicate that they actually were received by the recruits. These items were calendars and rulers. In the second district 26.9% of the recruits indicated that they received key chains and 24.5% indicated that they received pencils. For the eighth district these same figures were 14.3% and 18% respectively.

With regard to the Coast Guard Headquarters funded give away items that are distributed by the district recruiting forces, the following table is provided to show the percentage of recruits who actually received the items.

<u>Item</u>	<u>Percentage Giving Positive Response</u>
Bumper Stickers	36.5%
Matches	35.5%
Decals	24.7%
Book Covers	11.3%

These percentages are dependent upon the number of items, by type, provided by Coast Guard Headquarters, but also give some insight into the desire of applicants to receive such





items. If the applicant had no use for the item, it is unlikely that he would accept them even if offered at no cost.

When this information is cross tabulated by districts, the following trends were developed.

Book covers received a very even distribution between districts varying only six percent between districts with the second and eighth being the highest (12.7%) and the eleventh being the lowest (6.7%).

Matches displayed a wide variation with the second district displaying highest distribution (46.4%) and the lowest in the twelfth (22.8%). Decals were very evenly distributed between all of the districts. (Approximately 27% with the exception of the thirteenth, 12.9%.)

A wide variation was also noted between districts with regard to bumper sticker distribution (41.4% - 25.3%). The highest was again the second district with the thirteenth having the lowest.

These variations in distributions do not necessarily mean that the districts utilized these articles efficiently or inefficiently. They could be caused by having distributed the bulk of the annual supply to individuals at an earlier time in the year. Some items, such as book covers, are subject to seasonal fluctuations in usefulness, and therefore, may not be displaying a valid indication of the distribution.



## A. USEFULNESS OF ITEMS

Question 39 asked the recruits if they kept the items and their impression of the worth of the Coast Guard give away items. Forty-point-six percent of the recruits indicated that they did find these items worthwhile. Forty-six percent gave a negative response. This 46% included one hundred forty-five recruits who did not receive give away items. When this correction is made the percentages are as follows.

<u>Response</u>	<u>Percentage</u>
Yes, and found them worthwhile	64.3%
Yes, but not very worthwhile	14.1%
No	21.6%

These percentages indicate that almost two thirds of the applicants found the Coast Guard give away items useful. It should be remembered that the questionnaire was completed by recruits during their indoctrination training which may have caused a bias towards the favorable end of the spectrum.

## B. INNOVATIVE IDEA

The second district spent approximately two thousand dollars on give away items that deserves mention. These items were clearly identified with Coast Guard insignia, and were distributed as a gift of gratitude to people outside the service who assisted the Coast Guard recruiting effort. These items were primarily tie tacks and nylon windbreakers, with the windbreaker distributed only for outstanding effort.



These items were given in some cases to local electronic media representatives who had been particularly receptive to assisting the recruiter.



## VII. ECONOMIC TRADE OFFS

The optimal situation for the development of economic allocation mix analysis would be obtained if the manager were able to accurately determine the marginal benefit derived from each additional dollar spent on every type of input. If this were known, the manager would simply allocate his available resources until the marginal benefits per additional dollar were equal for all input factors [15]. Unfortunately the recruiting process, as with most activities, is a dynamic process that displays complex inter-relationships between all input factors in obtaining the final output, the qualified recruit. Due to these inter-relationships, it is very difficult to determine the actual benefit derived from any one factor. To further complicate the analysis, micro-economic theory states that the benefits derived from each input will decrease, at the margin, as more resources are allocated to it [15].

These inter-relationships and decreasing marginal returns do not make analysis impossible, however. Certain insights into the productivity of the inputs of production can be gained if a systematic review is conducted over time.

It is possible from the data base to estimate marginal productivity, for a very limited range of expenditures, for two input factors (advertising and recruiters' travel). This can be done by comparing the number of recruits enlisted with the allocation mixes in each district.





It should be noted before performing such an analysis that severe limitations exist and many assumptions have been made. The greatest limitation is the lack of data points. Since only three districts will be reviewed it is impossible to derive with any degree of certainty the magnitude of marginal benefit for more than a very limited relevant range. Extrapolation beyond this range should be done with extreme caution.

To perform the analysis several assumptions were necessary. Some of these assumptions can be disputed, and the size of their effect on the results is unknown. It has been assumed that the total effect of all factors with the exception of advertising expenditures and recruiting travel expenditures is the same for every district. This implies that each district's total recruiting force is equally adept at "selling" the Coast Guard. (This does not require that each recruiter be equally proficient, but that each force as a whole is equally proficient.) It also implies that no strong geographic bias exists for or against the Coast Guard. In effect this assumption asserts that all other factors are constant and that only recruiting travel and advertising expenditures affect recruiting.

It has also been assumed that the three districts are operating at an equal level of efficiency with regard to allocation of resources. These assumptions should be recognized when reviewing the results of this analysis.



By comparing two districts with similar expenditures for recruiting travel, but different expenditures for advertising, it is possible to estimate the marginal productivity of advertising. The table below performs this comparison:

<u>DISTRICT</u>	RECRUITER TRAVEL EXPENDITURE <u>FY 74</u>	ADVERTISING EXPENDITURE <u>FY 74</u>	RECRUITS ENLISTED <u>FY 74</u>
11	\$12,000	\$1,956	474
12	<u>\$12,600</u>	<u>\$6,059</u>	<u>526</u>
Difference (assume \$0)		\$4,003	52

MARGINAL PRODUCTIVITY =  $(\$4003/52) = \$77$  OF ADVERTISING PER ENLISTEE

By performing the same analysis on the twelfth and thirteenth districts which had similar expenditures for advertising, it is possible to estimate the marginal productivity of recruiters' travel.

<u>DISTRICT</u>	ADVERTISING EXPENDITURE <u>FY 74</u>	RECRUITER TRAVEL EXPENDITURE <u>FY 74</u>	RECRUITS ENLISTED <u>FY 74</u>
12	\$6,059	\$12,000	526
13	<u>\$5,882</u>	<u>\$21,000</u>	<u>611</u>
Difference (assume \$0)		\$ 9,000	85

MARGINAL PRODUCTIVITY OF RECRUITER'S TRAVEL =  $(\$9000/85) = \$106$  PER ENLISTEE

While the figures for enlistments and recruiter travel are dependent both directly and indirectly on the number of recruiters in the district, this should not affect the results since the recruiting forces were basically the same



size for the eleventh, twelfth, and thirteenth districts, (19.8, 21.6, 21.5 average on board strength respectively).

It should be noted that neither the advertising nor the recruiter travel figures used in this analysis are the total cost to the Coast Guard for these inputs. These figures only reflect the district expenditure for advertising and recruiting travel orders as defined in chapters IV and V.

#### A. IMPLICATIONS

These figures indicate that the marginal productivity of advertising is greater than that of recruiters' travel within the range reviewed. As noted earlier in this chapter the marginal productivity for both factors will decrease as more funds are allocated to that factor. The data base does not provide enough information to evaluate the rate of this change, however.

One implication of this finding is that the eleventh, twelfth, and thirteenth districts could have recruited the same number of recruits for a lower cost if more funds had been used for advertising and less for recruiters' travel during fiscal year 1974.

Another implication of this data is that any additional funds provided should be allocated to advertising until the marginal cost of acquiring another enlistee through advertising exceeds \$106.00.

This data also provides a bench mark against which new input programs may be measured by the procurement officer.



If a new program is to be funded, it must provide additional recruits at a cost less than \$77.00 per man. Otherwise the funds would be more productively spent on advertising.

To evaluate the marginal productivity of these inputs at different levels of expenditure would require more information than is available for this study. If this type of analysis was conducted for several fiscal years, it would be possible to further refine the estimates of marginal productivity.

This information is required if the optimal allocation mix is to be realized. In the absence of such information, the manager should estimate the marginal productivity of each program using the best information available.





### VIII. SUPPLEMENTAL DATA

Much of the questionnaire was designed to give the military procurement officer information regarding various behavioral traits which appear to be common among the individuals who eventually enlisted in the Coast Guard. Since the questionnaire was completed only by applicants who had enlisted in the Coast Guard, an understanding of their habits and activities would assist the procurement officer to allocate his resources more productively. This implies the assumption that the recruits who completed the questionnaire are typical of the individual who is likely to join the Coast Guard.

It is possible that some of the figures given below would be subject to seasonal fluctuations. Determination of the size of the fluctuation could only be made if such an analysis were repeated at regular times throughout the year (perhaps monthly or quarterly). This was not done for this study. The reader is reminded that the questionnaire was completed during early September 1974.

#### A. GENERAL INFORMATION

1) Four-point-five percent of the sample indicated that they had performed military service prior to their enlistment in the Coast Guard. This factor was relatively constant for each district.



2) Eighty-three percent of the sample were high school graduates. This factor was also relatively uniform for every district with the exception of the eighth district where 75.5% of the recruits had completed high school.

3) The mean age of the recruits was eighteen years seven months, with 67% indicating either 18 or 19 as their age to their nearest birthday.

4) With the exception of the second district, 25% of the recruits lived less than ten miles from either the Pacific Ocean or the Gulf of Mexico. Almost one-half of the recruits (49.2%) lived within 50 miles of one of these bodies of water. This trait did vary greatly between districts.

5) As discussed in chapter V, approximately one-third of the recruits had either a friend or relative in the Coast Guard prior to enlistment.

6) Over one-third (34.6%) of the recruits also indicated that their families owned a pleasure boat. This trait was relatively constant between districts except for the eleventh district (25.9%) and the thirteenth district (43.0%).

7) Thirty-eight percent of the recruits claimed more than two years full time employment prior to enlistment. Seventy-one-point-five percent indicated that they had more than six months of full time employment before they joined the service.

8) Sixty-one percent of the recruits indicated that they talked to a recruiter from another service. This question was discussed at length in chapter III, but is given here



only to show that the applicant probably will compare the programs offered by other services to those of the Coast Guard.

#### B. ADVERTISING INFORMATION

Questions 18-23 were asked to determine the most potentially productive advertising media. If it is possible to identify certain types of media that the potential recruit comes in contact with, it is likely that advertising expenditures could be made more effectively. In every district, almost 75% of the recruits indicated that they listened to a "rock" radio station two hours a day or more. Fifty-one percent of the recruits indicated that they spent four hours or more a day listening to "rock" radio stations.

Seventeen percent of the recruits indicated that they spend two hours a day, or more, listening to radio stations that played mostly "soul" music.

Twenty percent of the recruits indicated that they spent more than two hours a day listening to radio stations that were neither "rock" or "soul" stations primarily. It is believed by the author that this media (radio) has a great potential for making the perspective applicant aware of Coast Guard opportunities. Efforts should be made on the national and district level to more fully exploit the radio market. It is noted that while advertising time can not be purchased from the electronic media, innovative methods such as those used by the second district (see chapter VI) should be explored. The reader is reminded that only 35% of the



recruits ever heard a Coast Guard advertisement on the radio and only 10% indicated this media as the one that they remembered best.

With regard to the printed media, 34.7% of the recruits indicated that they read the sports section every day for the three months prior to enlistment. An additional 35% indicated that they only read this section one to three times a week. Twenty-seven percent of the sample stated that they only read sports sections once a month or less. This section of the paper, as a potential advertising media, should be carefully reviewed before any expenditures are made.

Almost one-half of the recruits stated that they read the general news section of the newspaper every day for the three months prior to enlistment. An additional 29% indicated that they read this section two or three times a week. While the depth of their reading is unknown, this does appear to be a fruitful means of notifying potential recruits of opportunities in the Coast Guard.

The last section of the printed media to be reviewed is the classified section of the newspaper. Unlike the previous two sections, this section of the paper possesses a degree of directness. By advertising in the "Help Wanted" column, it can be assumed that the service is reaching those individuals who are either unemployed or are at least displeased with their present position. For the three months prior to enlistment, 26.7% of the recruits claimed that they read the classified section every day. An additional 50% of the





recruits indicated that they read the classified section at least once a week. It should be noted, however, that the question did not specify the "Help Wanted" column. Two pieces of information can be obtained from the result of this question. Due to the number of repeat readings, it is unlikely that excessive advertising in this media would produce extremely large results. (Constant returns to scale are unlikely to exist.) Second, due to the directness of the method, it does show increasing returns of a very large amount for small inputs. It is very likely that such advertising would be most productive if it is dispersed over time and geographic areas to reach as many different individuals as possible. For example, these funds might be spent more efficiently if classified advertising were made only once a month in each city where the recruiters are present. This would increase the number of possible applicants over what would be expected if the same total amount was spent on an advertisement that was listed in one paper for a longer period of time.

Other methods of advertising were not reviewed and should be the subject for future study.



## IX. CONCLUSIONS

After reviewing three of the input factors used in the recruiting effort (advertising, recruiters' travel, and give away items) along with the budgeting process for five Coast Guard military procurement branches, the following conclusions have been drawn.

As discussed in chapter I, none of military procurement officers were aware of the marginal productivity of the factors reviewed. The perception of productivities expressed by four of the five procurement officers in chapter III did correspond with the findings in chapter VII, in that these officers perceived advertising as providing greater marginal productivity than recruiters' travel.

It is concluded that a reallocation of recruiting resources in the eleventh, twelfth, and thirteenth districts would have provided the same number of recruits for a smaller expenditure, or a larger number of recruits for the same expenditure. This reallocation would require a greater use of advertising with a corresponding decrease in recruiters' travel. While it is believed that this statement is also true for the second and eighth districts, the data base does not provide the necessary supportive information.

It is further concluded that the present use of incremental budgeting at the district level, as discussed in chapter I, does not provide for a systematic review of all programs. Four of the five procurement officers were not



aware of the benefits a zero base budget can provide nor were they aware of the steps necessary in the implementation of such a budget. These factors contributed to the less than optimal allocation mix.

It has been concluded, as discussed in chapter I, that the military procurement officers in the eleventh and second district, do not have the control over recruiting travel funds that is necessary to achieve optimum productivity from recruiting resources.

As discussed in chapter IV, some types of direct advertising, particularly advertising in newspapers, reach a definite level of diminishing marginal returns. The marginal returns for this type of advertising, (using the present criteria for placing advertisements) approaches zero at approximately \$4,000 per district. It is believed, as stated in chapter VIII that a more systematic approach to newspaper advertising would increase the productivity of this type of expenditure. This approach would require dispersing such advertisements over time and geographic areas in the district to reach a larger number of potential applicants. The study does not provide the information necessary to support this statement, however.

As discussed in chapter III, the Coast Guard recruiting effort benefits both from "in house" recruiting and from referral of people outside the service. While these benefits are derived without an identifiable cost, at the present time they are also uncontrollable at the district or



headquarters level. As discussed in chapter III, the cause of such referrals can not be determined from this study.

It has been concluded from chapter IV that the district recruiting effort benefits from advertising funded by the Commandant's office. The amount of benefit each district receives is not perfectly equal or accurately identifiable from the data base. Exhibit 3 indicates, however, that 65% of the respondents to the questionnaire would have been aware of at least one Coast Guard advertisement if the districts had spent no money on advertising.

As discussed in chapter V, the procurement officers have not been provided with guidance from Coast Guard Headquarters concerning the objectives to be pursued through recruiting travel. At least one procurement officer was attempting to give his district uniform coverage instead of striving for productivity.

It has been concluded from chapter III that the Coast Guard enjoys a very high "capture" rate of applicants who first talked to other service recruiters. This capture rate is greatest among applicants who talked to a Navy recruiter first.

It has also been concluded from chapters III and VIII that behavioral traits can be identified that the respondents to the questionnaire possess. While the data base does not provide supportive evidence, it is believed that resource allocations can be made capitalizing on these behavioral traits thus increasing the productivity of some input factors.





## X. RECOMMENDATIONS

Based on the research and conclusions of this paper, the following recommendations are provided.

### A.. PRIMARY RECOMMENDATIONS

#### 1. Budget Review

It is recommended that each district procurement officer review his current allocation mix and make the appropriate changes based on the marginal productivities derived in this paper. Specifically this should include a reduction in recruiters' travel expenditures and an increase in local advertising.

#### 2. Zero Base Budget

It is recommended that each district procurement office prepare all future budget proposals utilizing the zero base budget. This would require a review of all input factors and an allocation of resources so that the marginal productivities of all factors are equal.

#### 3. Further Study

It is recommended that further study be conducted to determine the marginal productivity of all input factors utilized in the recruiting effort. This paper only provides this information for two such factors, and for a very limited relevant range. To achieve optimality in the budgeting process, this information must be expanded. This information should be re-evaluated periodically since the marginal



productivity of an input will not necessarily remain constant over long periods of time.

#### 4. Productivity or Uniform Coverage

It is recommended that the Commandant's office issue a clear statement establishing the criteria for recruiting travel. The question of uniform coverage or productivity is a policy judgment that can be made only at the headquarters level. The productivity criteria is strongly recommended for optimal budget allocation.

### B. SECONDARY RECOMMENDATIONS

The following recommendations, while not directly related to the thesis topic, are provided based on the author's belief that they will improve the recruiting effort.

#### 1. Separation of Recruiting and Training

It is recommended that those districts who have not yet separated the recruiting and training functions, do so as soon as possible. Failure to fund these programs under separate allotments could have long term harmful effects on the Coast Guard.

The benefits from training are realized only in the long term. Recruiting proficiency, however, is measured with the short term tool of percentage of quota obtained. If the procurement officer is forced to trade these programs against each other a temptation exists to forego the training of personnel until more funds are available. This problem is even greater if the procurement officer perceives his



performance to be primarily judged by his ability to meet his short term goal (the recruiting quota). It is believed that the amount of district funds to be allocated to each of these vital programs should be determined by the district commander or his immediate staff. Forcing this policy decision on the branch chief level can prove very unproductive. There appears to be no direct relationship between the training and recruiting function that requires both duties be performed by the same branch. It is noted that some districts have already separated these functions.

## 2. Control of Funds

It is recommended that the military procurement officer have direct control over all district funds earmarked for the recruiting effort. Since the procurement officer is held responsible for meeting the district's recruiting quota with qualified recruits, he should be given control of all funds allocated for that program.

## 3. Work Load Review

It is recommended that the personnel division at both the headquarters and district level perform a review of the work load requirements for the military procurement branch. Such a review should consider the seasonal fluctuations in the functions performed and the amount of personal involvement desired in both enlisted and officer procurement by the military procurement officer. It is noted that many of the military procurement officer billets were recently upgraded, solving an experience level problem; however, this did not



lessen the severe time constraints that each office operates under.

#### 4. Dissemination of Information

While researching this paper, it became obvious that many of the military procurement officers were not aware of the large number of studies conducted by the Coast Guard and Department of Defense agencies regarding recruiting. This was not true, however, of their counterparts at Coast Guard Headquarters. It is recommended that each procurement officer be informed of the information resources available through the Defense Documentation Center. Upon receipt and review of studies related to recruiting at Coast Guard Headquarters, an abstract should be promulgated to each district branch chief. It is recommended that the Commandant's office also assist the military procurement officer in obtaining copies of requested studies.

#### 5. Internal Coordination

The high level of awareness of Coast Guard advertising indicates that recruits may have seen not only Coast Guard recruiting advertisements, but also boating safety and public information releases. Unlike the other armed services, the Coast Guard is placed in the public view by many groups. Boating safety, Military Procurement, and Public Information branches all are contacting, regularly, the various media and the public at large. It is recommended that the branch chiefs from each of these offices meet regularly to coordinate their activities, disseminate information





concerning public events of mutual interest, and to avoid duplication of effort. Such action will present a more united program to the news media when applying for public service time, and will also provide each officer with more flexibility to meet his commitments. The flexibility is derived from the combined efforts of the three offices.

#### 6. Exploitation of High Capture Rate

Since the Coast Guard enjoys the ability to "capture" applicants from other services, every effort should be made to exploit this opportunity. Collocation of recruiting offices should be encouraged. Close working relationships with other service recruiters should be maintained. At all times the high standard of professional ethics and courtesy that has been informally established between recruiters should be continued.

#### 7. Exploitation of Inter-relationships

As has been previously noted, recruiting is a process of inter-relationships. Recognition and utilization of this fact should be made. As an example, it is believed that the productivity of recruiting travel and advertising could be increased if the factors were made to compliment each other. If a classified advertisement were placed in the area where a recruiter expects to visit prior to his arrival, stating where, when, and how he could be contacted, the trip may be more productive. Other similar practices should be explored.



APPENDIX A  
RECRUITING QUESTIONNAIRE

The questionnaire you are about to complete is designed to assist the Coast Guard in attracting more qualified applicants like yourself. The purpose is to determine the effectiveness of the recruiting effort in specific areas.

THERE ARE NO RIGHT OR WRONG ANSWERS.

You have been provided with an answer sheet. You are to mark the appropriate block on the answer sheet with a number 2 pencil only. Do not mark more than one block on each question. Answer questions 1-45 and disregard all other areas on the answer sheet.

Your careful and honest response hopefully will enable the Coast Guard to enlist the highly motivated individual that is necessary to perform our varied and vital duties.

PART I - General Information

1. In which Coast Guard District were you enlisted?  
(See map on last page)

a) 2 or 14      b) 8      c) 11      d) 12      e) 13

2. Have you had prior military service?

a) yes              b) no

3. Are you a high school graduate?

a) yes              b) no

4. How old are you? (Mark nearest year)

a) 17      b) 18      c) 19      d) 20      e) over 20



5. How close do you live to the ocean or Gulf?
- a) less than 10 miles
  - b) 10 to 20 miles
  - c) 20 to 50 miles
  - d) over 50 miles
6. Prior to your enlistment, did you have any friends or relatives in the Coast Guard?
- a) none          b) brother          c) father
  - d) friend          e) other relative
7. Did you look for the Coast Guard Recruiter or did he search you out?
- a) I contacted him first      b) He contacted me first
8. Where did you get the most information about the Coast Guard?
- a) From my family or friends
  - b) From advertising (radio, T.V., Magazines)
  - c) From a Coast Guard Recruiter
  - d) From my High School counselor
9. Does you family own a pleasure boat? (A non-commercial craft, privately owned.)
- a) yes                  b) no
10. How many relatives, to your knowledge, have been in the Coast Guard? (such as father, brother, sister, uncle, father-in-law, cousin, etc.)
- a) none      b) one      c) two      d) three      e) four or more
11. How many of your family or friends of your family are in the Coast Guard Auxiliary?
- a) none      b) one      c) two      d) three      e) four or more



12. Altogether what is the total amount of full time employment you had before you joined the Coast Guard?
- a) less than one month
  - b) more than one month, less than six months
  - c) more than six months, less than one year
  - d) more than one year, less than two years
  - e) over two years
13. Did you talk to any recruiters from the other services?
- a) yes
  - b) no
14. Which recruiter did you see first?
- a) Army      b) Navy      c) Coast Guard
  - d) Air Force      e) Marine Corps

## PART II - Advertising

15. Do you remember seeing any Coast Guard Advertising before you enlisted?
- a) yes
  - b) no
16. Where did you see/hear these advertisements? (Select the one you remember best.)
- a) Television      b) Radio      c) Newspaper
  - d) High school mag. or newspaper      e) Billboards
17. How much did these advertisements impress you?
- a) Impressed me very much
  - b) Impressed me moderately
  - c) Impressed me very little
  - d) Did not impress me at all
  - e) Impressed me unfavorably
18. How much time did you spend listening to rock stations on the radio prior to enlistment?
- a) four or more hours per day
  - b) two or three hours per day
  - c) three or four hours per week
  - d) less than two hours per week





19. How much time did you spend listening to radio stations that played mostly soul music?
- a) four or more hours per day
  - b) two or three hours per day
  - c) three or four hours per week
  - d) less than two hours per week
20. How much time did you spend listening to radio stations that were neither "rock" or "soul" stations?
- a) four or more hours per day
  - b) two or three hours per day
  - c) three or four hours per week
  - d) less than two hours per week

Questions 21-23 indicates how often you read the following sections of the newspaper during the three months prior to your enlistment. (best guess)

21. Sports section?
- a) Every day
  - b) About two or three times a week
  - c) About once a week
  - d) About once a month or less
22. General News section?
- a) Every day
  - b) About two or three times a week
  - c) About once a week
  - d) About once a month or less
23. Classified section?
- a) Every day
  - b) About two or three times a week
  - c) About once a week
  - d) About once a month or less

Questions 24-28. About how many times (Best Guess) did you see/hear Coast Guard advertising of the following types during the three months prior to enlistment?

24. Newspaper?
- a) Never
  - b) Once or twice
  - c) Three to five times
  - d) More than five times



25. Magazines?
- a) Never
  - b) Once or twice
  - c) Three to five times
  - d) More than five times
26. Radio?
- a) Never
  - b) Once or twice
  - c) Three to five times
  - d) More than five times
27. Television?
- a) Never
  - b) Once or twice
  - c) Three to five times
  - d) More than five times
28. Billboards?
- a) Never
  - b) Once or twice
  - c) Three to five times
  - d) More than five times
29. Which method of advertising do you remember best?
- a) Television
  - b) Radio
  - c) Magazines
  - d) Billboards
  - e) Newspaper
30. Which of the following do you think was the most important factor in your decision to contact a Coast Guard recruiter?
- a) Advertising
  - b) A telephone call or personal contact with Coast Guard representative
  - c) Advice from a friend or relative
  - d) Advice from a school teacher or counselor



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In questions 31-38 indicate whether you received any of the Coast Guard marked items indicated below.

31. Book covers
- a) yes                      b) no
32. Matches
- a) yes                      b) no
33. Key chains
- a) yes                      b) no
34. Pencils
- a) yes                      b) no
35. Calendars
- a) yes                      b) no
36. Rulers
- a) yes                      b) no
37. Decals
- a) yes                      b) no
38. Bumper stickers
- a) yes                      b) no
39. Did you ever use any of the items listed in questions  
31-38?
- a) Yes, and found them worthwhile
- b) Yes, but not very worthwhile
- c) No



## PART IV - Recruiter Travel

40. Is there a Coast Guard recruiter in your home town?
- a) yes                                  b) no
41. Approximately how far do you live from the closest Coast Guard Recruiting Office open every work day?
- a) less than five miles  
b) five to fifteen miles  
c) fifteen to fifty miles  
d) over fifty miles

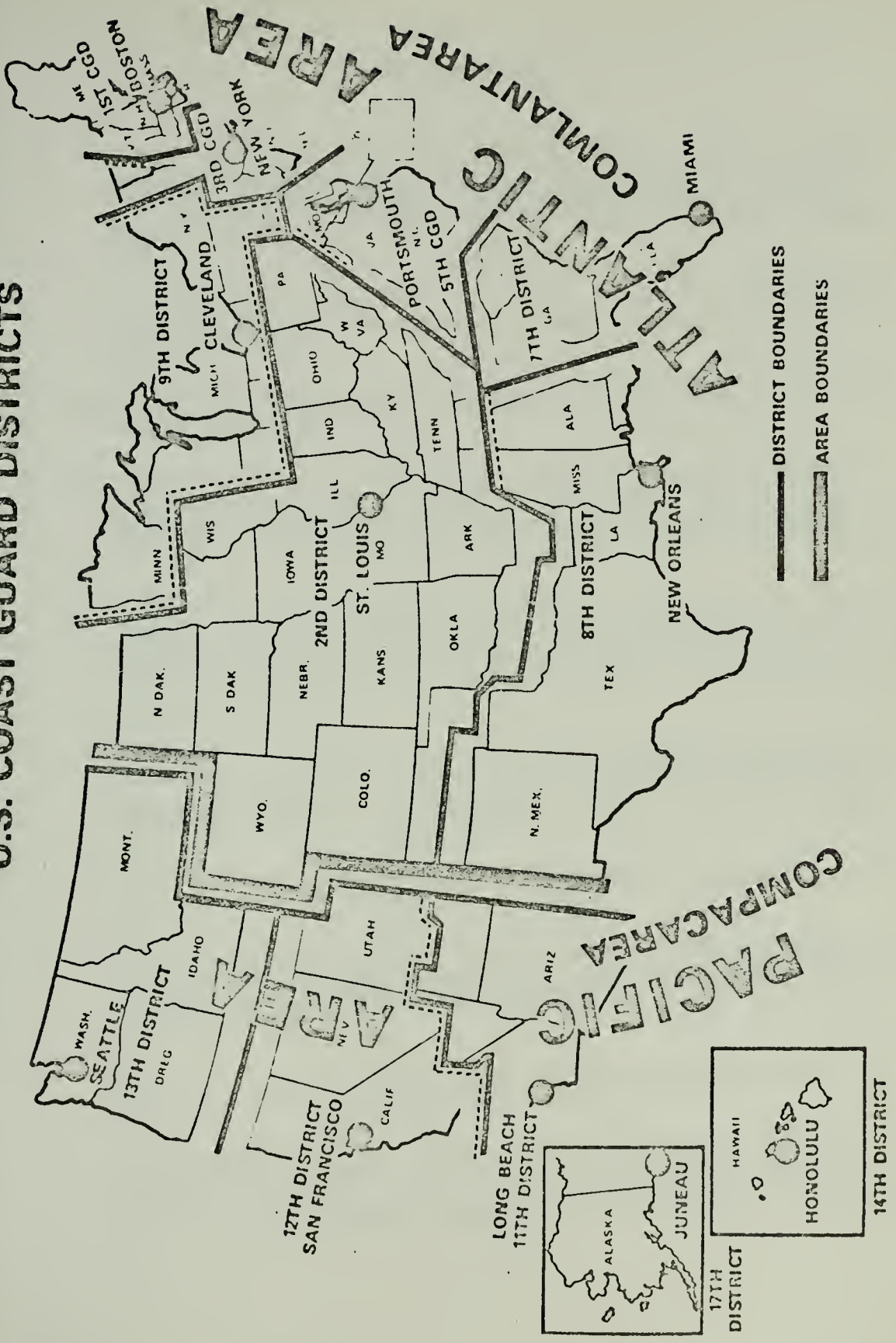
In questions 42-44 indicate if you saw a Coast Guard recruiter or representative at the listed events.

42. Local, County or State Fair
- a) yes                                  b) no
43. Career Day
- a) yes                                  b) no
44. Boat Show
- a) yes                                  b) no
45. Were you impressed with the display at these events?
- a) I never saw one
- b) Very impressive
- c) Moderately impressive
- d) Moderately unimpressive
- e) Very unimpressive





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